

KUEP Series Panel Plug-in Relay

- 1 Form X, 2 Form A and 2 Form C contact arrangements
- 10 amp current rating
- Magnetic blow-out
- Various mounting options
- Indicator lamp available

Typical applications
DC load switching in industrial controls



Approvals

UL E22575; CSA LR15734; CE (KUEP-11 only)
Technical data of approved types on request

Contact Data

| | | |
|-------------------------------|--|---------------|
| Contact arrangement | 1 form X (NO-DM), 2 form A (NO), 2 form C (CO) | |
| Rated voltage | 150VDC | |
| Rated current | 10A | |
| Contact material | AgCdO | AgSnOInO |
| Min. recommended contact load | 300mA, 12VDC | |
| Frequency of operation | 360 ops./hour | 360 ops./hour |
| Operate/releases time max. | 15/10ms | |
| Bounce time max. | 17ms | |

Contact ratings

| Type | Load | Cycles |
|--------------------------|---------------------------|---------------------|
| UL 508 | | |
| KUEP, 1 form X, AgCdO | | |
| | 10A, 150VDC | 100x10 ³ |
| | 1A, 300VDC | 100x10 ³ |
| | 2.5 A, 170 VDC, resistive | 100x10 ³ |
| KUEP, 2 form A, AgCdO | | |
| | 5 A, 150 VDC | |
| | 2.5 A, 170 VDC, resistive | 100x10 ³ |
| KUEP, 2 form C, AgCdO | | |
| | 3 A, 150 VDC | |
| | 2.5 A, 170 VDC, resistive | 100x10 ³ |
| | 10 A, 240 VAC | |
| | 10 A, 32 VDC | |
| | 5 FLA, 15 LRA, 250 VAC | |
| | 1/3 HP, 120 VAC | |
| | 5 A, 120 VAC, tungsten | |
| | 1/2 HP, 250 VAC | |
| | 10 FLA, 40 LRA, 125 VAC | |
| | 3 A, 600 VAC | |
| | 1/2 HP, 480 VAC | |
| | 1/2 HP, 600 VAC | |
| | 1 HP, 480 VAC, 3 phase | |
| KUEP, 1 form X, AgSnOInO | | |
| | 10A, 150VDC, resistive | 30x10 ³ |
| KUEP, 2 form A, AgSnOInO | | |
| | 5 A, 150 VDC, resistive | 100x10 ³ |
| KUEP, 2 form C, AgSnOInO | | |
| | 3 A, 150 VDC, resistive | 100x10 ³ |
| Mechanical endurance | 10x10 ⁶ ops. | |

Note: Indicated contact ratings and electrical endurance data apply only for direct wiring of the relay (according to UL 508/61810-1); for relays mounted on sockets, deratings may apply.

Coil Data

| | |
|-------------------------------------|-------------|
| Coil voltage range | 5 to 125VDC |
| | 6 to 240VAC |
| Coil insulation system according UL | Class B |

Coil versions, DC coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Coil resistance $\Omega \pm 10\%$ | Rated coil power W |
|-------------------|-------------------|---------------------|-----------------------------------|--------------------|
| One pole versions | | | | |
| 5 | 5 | 3.75 | 21 | 1.2 |
| 6 | 6 | 4.5 | 32 | 1.125 |
| 12 | 12 | 9.0 | 120 | 1.2 |
| 24 | 24 | 18.0 | 472 | 1.25 |
| 48 | 48 | 36.0 | 1800 | 1.3 |
| 110 | 110 | 82.5 | 10000 | 1.25 |
| 125 | 125 | 93.75 | 13000 | 1.2 |
| Two pole versions | | | | |
| 5 | 5 | 3.75 | 14 | 1.8 |
| 6 | 6 | 4.5 | 20 | 1.8 |
| 12 | 12 | 9.0 | 80 | 1.8 |
| 24 | 24 | 18.0 | 320 | 1.8 |
| 48 | 48 | 36.0 | 1250 | 1.85 |
| 110 | 110 | 82.5 | 6720 | 1.8 |
| 125 | 125 | 93.75 | 8680 | 1.8 |

All figures are given for coil without preenergization, at ambient temperature +23°C.

Coil versions, AC coil

| Coil code | Rated voltage VAC | Operate voltage VAC | Coil resistance $\Omega \pm 15\%$ | Rated coil power VA |
|-------------------|-------------------|---------------------|-----------------------------------|---------------------|
| One pole versions | | | | |
| 6 | 6 | 5.1 | 6 | 2.0 |
| 12 | 12 | 10.2 | 24 | 2.0 |
| 24 | 24 | 20.4 | 85 | 2.0 |
| 120 | 120 | 102.0 | 2250 | 2.1 |
| 240 | 240 | 204.0 | 9110 | 2.1 |
| Two pole versions | | | | |
| 6 | 6 | 5.1 | 4.2 | 2.8 |
| 12 | 12 | 10.2 | 18 | 2.8 |
| 24 | 24 | 20.4 | 72 | 2.8 |
| 120 | 120 | 102.0 | 1700 | 2.9 |
| 240 | 240 | 204.0 | 7200 | 2.9 |

All figures are given for coil without preenergization, at ambient temperature +23°C.

Insulation Data

| | |
|-------------------------------|----------------------|
| Initial dielectric strength | |
| between open contacts | 1200V _{rms} |
| between contact and coil | 2200V _{rms} |
| between adjacent contacts | 2200V _{rms} |
| Initial insulation resistance | |
| between insulated elements | 100M Ω |

KUEP Series Panel Plug-in Relay (Continued)

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

Ambient temperature

| | |
|---------|--|
| DC coil | -45°C to 70°C |
| AC coil | 1 pole: -45°C to 55°C 2 pole: -45°C to 45°C |

Category of environmental protection

| | |
|-----------------------------------|---------------------------------|
| IEC 61810 | RTI - dust protected |
| Vibration resistance (functional) | .065" double amplitude, 10-55Hz |
| Shock resistance (functional) | 15g, 11ms (non-operating) |

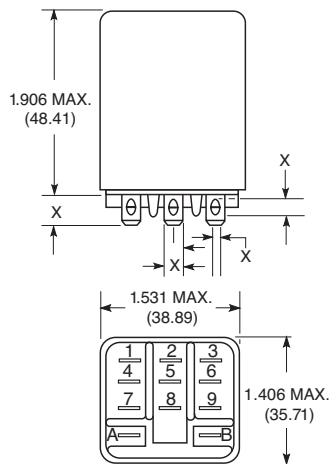
Terminal type Quick connects (QC), .187 or .205 PCB-THT

Terminal retention, push force

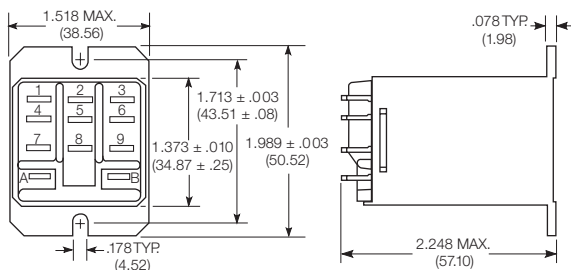
| | |
|---------|---------------|
| QC .205 | 17 lbs for 3s |
| QC .187 | 25 lbs for 3s |

Dimensions

Plain case



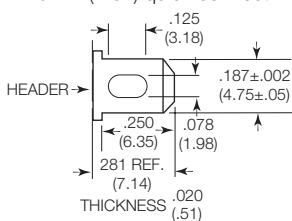
Top flange case



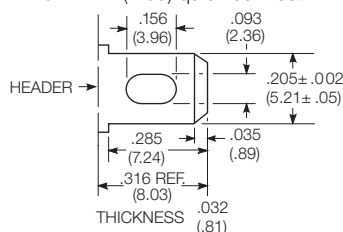
X Is For Terminal Dimensions.
See Terminal Drawings.

Terminal dimensions

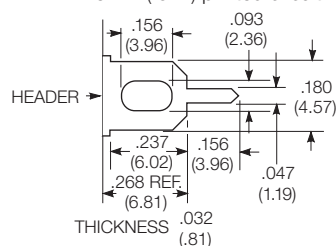
4.75mm (.187) quick connect



5.21mm (.205) quick connect



1.19mm (.047) printed circuit



Other Data (Continued)

| | |
|----------------|---------------------------|
| Weight | 85g |
| Packaging/unit | tray/25 pcs., box/150pcs. |

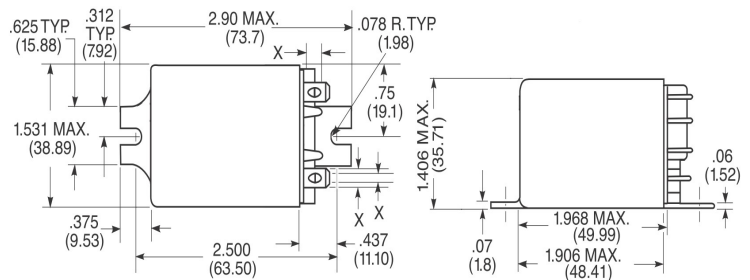
Accessories

| | |
|---------------------------|-------------------------------------|
| For details see datasheet | Sockets and Accessories, KUP Relays |
|---------------------------|-------------------------------------|

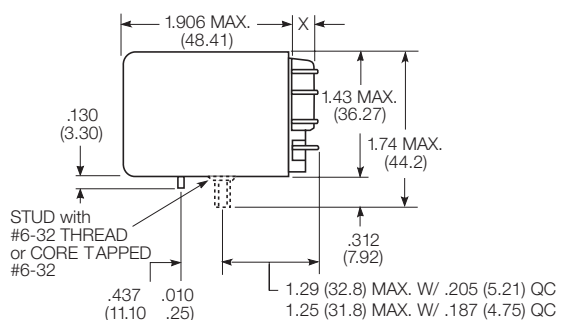
Product Code Description

| | |
|--------|--|
| 27E893 | DIN socket (use 20C318 clip) |
| 27E121 | Track mount socket (use 20C314 clips) |
| 27E043 | Chassis mount/solder eyelet socket (use 20C254 clip) |
| 27E046 | Chassis mount/PCB socket (use 20C254 clip) |
| 27E067 | Chassis mount/quick connect socket (use 20C254 clip) |
| 27E396 | Snap-in/quick connect socket (use 20C254 clip) |

Bracket mount case



Core / stud mount case



KUEP Series Panel Plug-in Relay (Continued)

PCB layout

Bottom view on solder pins

1 form X version

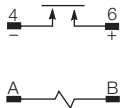


2 form C version shown
(Omit unnecessary holes for
form A types)

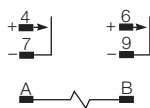


Terminal assignment

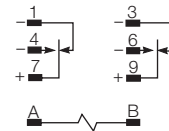
1 Form X



2 Form A



2 Form C



Load polarity noted above is recommended for optimum arc suppression.

Product code structure

Typical product code **KUEP -3 A 1 5 -120**

Type

KUEP Enclosed relay with magnetic blow-outs

Contact arrangement and rating

3 1 form X (1 NO-DM) **7** 2 form A (2 NO)
11 2 form C (2 CO)

Coil Input

A AC, 50/60Hz **D** DC

Mounting and options

1 Socket mount (plain) case **3** Socket mount (plain) case, with indicator lamp ¹⁾
5 Bracket mount case **A** Plain case with #6-32 stud and locating tab
E Plain case with #6-32 tapped core and locating tab **T** Top flange case
¹⁾ Indicator lamps are available on models with the following coils: 6-24VAC and VDC, 110VDC and 120-240VAC.
Only models with 120-240VAC coils are UL recognized.

Terminal and contact material

5 4.75mm (.187in) quick connect/solder; AgCdO **6** 5.21mm (.205in) quick connect/solder; AgCdO
7 1.19mm (.047in) PCB, AgCdO **P** 4.75mm (.187in) quick connect/solder; AgSnOInO
R 5.21mm (.205in) quick connect/solder; AgSnOInO **S** 1.19mm (.047in) PCB, AgSnOInO

Coil voltage

Coil code: please refer to coil versions table

| Product Code | Arrangement | Material | Coil | Terminals | Mounting | Part Number |
|----------------|-------------------|----------|---------|--------------------|--|-------------|
| KUEP-3A15-120 | 1 Form X, 1 NO-DM | AgCdO | 120 VAC | 4.75mm (.187in) QC | Socket mount, plain case | 9-1393113-4 |
| KUEP-3D15-12 | | | 12 VDC | | | 9-1393113-8 |
| KUEP-3D15-24 | | | 24 VDC | | | 1393114-1 |
| KUEP-3D15-48 | | | 48 VDC | | | 1393114-2 |
| KUEP-3D15-110 | | | 110 VDC | | | 9-1393113-7 |
| KUEP-3D35-24 | | | 24 VDC | | Socket mount, plain case w/ indicator lamp | 1393114-5 |
| KUEP-7D15-24 | 2 Form A, 2 NO | | | | Socket mount, plain case | 1-1393114-1 |
| KUEP-11A15-120 | 2 Form C, 2 CO | | 120 VAC | | | 8-1393113-3 |
| KUEP-11D15-12 | | | 12 VDC | | | 8-1393113-6 |
| KUEP-11D15-24 | | | 24 VDC | | | 8-1393113-7 |
| KUEP-11D15-48 | | | 48 VDC | | | 8-1393113-8 |
| KUEP-11D15-110 | | | 110 VDC | | | 8-1393113-5 |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[KUEP-11D15-24](#)